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FROMMER LAWRENCE & HAUG  
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NEW YORK, NY 10151

EXAMINER
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SALCE, JASON P

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2614

DATE MAILED: 12/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/431,437	<b>Applicant(s)</b> SHIGA ET AL.	
	<b>Examiner</b> Jason P. Salce	<b>Art Unit</b> 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 40-59 and 87-126 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 40-59 and 87-126 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 November 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Drawings*

1. The examiner agrees with Applicant's arguments regarding elements 303-1 and 240 residing in Figures 1 and 28, respectively. The previous drawing objection is therefore withdrawn.

### *Response to Arguments*

2. Applicant's arguments filed 9/23/2005 have been fully considered but they are not persuasive.

Applicant has amended the claims to recite the additional limitations, "whereby said image data is sufficient for generating said reduced size images, such that generation of said reduced size images does not require linking said image data to other data". The examiner notes that the newly added claim limitation does not overcome the double patenting rejection and prior art rejection, and further introduces a 112 2<sup>nd</sup> paragraph rejection in view of the newly amended claims (see below).

### **112 2<sup>nd</sup> Paragraph Rejection**

3. In regards to the new claim limitations, the examiner cannot determine if the generating and generation limitations are performed at the transmitter or receiver side.

The claim limitations are broad and clearly generation of the reduced size images can be performed by element 309 in Figure 1 at the transmitter side or the receiver side

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by element 24 in Figure 23. There is no antecedence that requires the generating or generation limitations to be performed on either side of the system.

Furthermore, Applicant argues that Lawler provides a link to a video preview, which is why the negative limitation was added to the claims, however, the negative limitation does not exclude a video preview, the negative limitation excludes linking said image data to other data, which reads on the image data not being required to be linked to any type of other data. Assume that the other data represented the category icons displayed along side the "still picture"/image data in Figure 6 of the '562 patent and instant application, how would the image data not be linked to these category icons upon generating the display? The image data would have to be linked, otherwise the category icons would be displayed in the image data of conflicting categories. Many other interpretations of linking image data to other data reside in the specification of Shiga, on both sides of the system (transmitter and receiver).

In view of Applicant's arguments, the examiner recognizes the possible interpretation of the claims in relation to the video preview link, however, because of the broad recitation of the claims, the examiner views a 112 2<sup>nd</sup> Paragraph rejection is proper and the examiner recommends that Applicant further limit the claims to properly define where in the system the generating/generation steps are being performed, as well as the actual data that the "other data" is representative of.

**Double Patenting**

4. The examiner notes that the negative limitation stated above is insufficient for overcoming the double patenting rejection and a detailed explanation is provided below.

The MPEP states at section 2106, that whereby clauses may raise a question as to the limiting effect of the language in a claim. MPEP 2106 also clearly states that, **“Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitations”**. Also further note that the ‘562 patent claims themselves provide support for the negative limitation, which will also be discussed below, in conjunction with the non-limiting scope language in the amend claim limitation in the instant application.

In regards to the first half of the negative limitation, “whereby said image data is sufficient for generating said reduced size images”, in claim 40 of the Applicant’s instant application and claim 29 of the ‘562 patent, the claim states, “means for displaying on said display means said images of reduced, less than normal size”. Clearly if the image data is used by the means for display (as recited in the claims) to create the images of reduced size, then the image data is clearly sufficient for generating said reduced size images because if the image data was not sufficient, the means for displaying would not be able to provide the images of reduced size on the display. Therefore, the claim limitations of the ‘562 patent themselves teach the amended claim limitation, “whereby said image data is sufficient for generating said reduced size images” of the instant application.

In regards to the second half of the negative limitation, "such that generation of said reduced size images does not require linking said image data to other data".

Clearly this limitation provides language **that suggests or makes optional but does not REQUIRE steps to be performed**, and therefore does not limit the scope of the claim (see again MPEP 2106 and also 2111.04 for further reference).

Further note that the negative limitation is broad and could refer to the generation of the reduced size images from the device that is transmitting the data to the receiver. The claim recites an apparatus for receiving the data, therefore the claim clearly **does not limit a claim to a particular structure**, where the particular structure in this case, is the receiver apparatus, and the functionality of the negative limitation, could be provided from a transmitter. Because the claim limitations are broad, the claims do not specify a location of where the generation/generating steps are performed. Therefore in regards to the transmitter and system claims, the same logic applies, where the claim is not limited to a particular structure (for example, in the transmitter claim, the claims can be interpreted to provide generation at the receiver side, and in the system claim, a determination cannot be made whether the receiver or the transmitter providing the generating/generation steps).

Therefore, the negative (functional) limitation added to the claim limitations does not limit the scope of the claim, and therefore, the double patenting rejection stands.

Further note that if Applicant believes that the negative claim limitation does in fact limit the scope of the claim (which the examiner has determined does not according to MPEP 2106), the examiner will present evidence (two examples) of how the '562

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patent claim limitation themselves read on the amended claim limitation, "such that generation of said reduced size images does not require linking said image data to other data".

The examiner notes that in regards to the '562 patent's claim limitations, the generation of said reduced size images is taught by the means for displaying step and clearly the displaying of such reduced sized images **would not require** linking said image data to other data, because if a piece of data is not required to have a link, this does not exclude that the piece of data from having the link.

Alternatively, the examiner notes (in regards to the second part of the negative limitation) that the '562 patent claim limitations also state that the means for displaying is capable of displaying the images of reduced size in superposition over the displayed program (program data). Since the image data (images of reduced size) is simply superimposed over the displayed program, then clearly the generation of said reduced size images does not require linking said image data to other data (the program data), because the reduced size images are positioned over the program data without any need for linking the two pieces of data (note that the means for displaying is interpreted to be the NTSC encoder 27 in Figure 23, which performs the superposition without the image data (reduced size images) being linked to other data (program data) at Column 19, Lines 34-36).

Therefore, the claim limitations themselves provide support for the amended functional (negative) limitation of the structure defined in claim 40 and the double patenting rejection still stands.

**Prior Art Rejection**

5. The examiner has discovered a more detailed reference regarding an EPG presented with reduced sized images. Therefore, new grounds of rejection will be presented below in view of Matthews, III (U.S. Patent No. 5,815,145).

The examiner notes that in regards to the prior art rejection, the examiner's argument regarding the non-limiting scope claim language stands (see arguments above), however, in the case that Applicant does not agree and traverses the examiner's argument, and provided that the examiner would agree with Applicant's traversal, in order to expedite the prosecution of the instant application, the examiner will also provide evidence of how Matthews would read on the amended claim limitations.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

6. Claims 40, 87, 92, 99, 105, 113 and 121 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regards to the new claim limitations, the examiner cannot determine if the generating and generation limitations are performed at the transmitter or receiver side.



The claim limitations are broad and clearly generation of the reduced size images can be performed by element 309 in Figure 1 at the transmitter side or the receiver side by element 24 in Figure 23. There is no antecedence that requires the generating or generation limitations to be performed on either side of the system.

Furthermore, Applicant argues that Lawler provides a link to a video preview, which is why the negative limitation was added to the claims, however, the negative limitation does not exclude a video preview, the negative limitation excludes linking said image data to other data, which reads on the image data not being required to be linked to any type of other data. Assume that the other data represented the category icons displayed along side the “still picture”/image data in Figure 6 of the ‘562 patent and instant application, how would the image data not be linked to these category icons upon generating the display? The image data would have to be linked, otherwise the category icons would be displayed in the image data of conflicting categories. Many other interpretations of linking image data to other data reside in the specification of Shiga, on both sides of the system (transmitter and receiver).

In view of Applicant’s arguments, the examiner recognizes the possible interpretation of the claims in relation to the video preview link, however, because of the broad recitation of the claims, the examiner views a 112 2<sup>nd</sup> Paragraph rejection is proper and the examiner recommends that Applicant further limit the claims to properly define where in the system the generating/generation steps are being performed, as well as the actual data that the “other data” is representative of.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 40-59 and 87-126 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 29-40, 60-61, 82-83, and 85-86 of U.S. Patent No. 6,005,562. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant application are broader than the patented claims, and are therefore anticipated by the patent (see *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993)).

In regards to independent claim 40 of the instant application, see claim 29 of the '562 patent for an apparatus that contains identical limitations, except for the limitation of a "program" in the instant application, as opposed to a "first program" in the '562 patent. Again, since the limitation "program" is broader than the limitation "first program", claim 40 of the instant application is anticipated by the specific claim 29 in the '562 patent (see *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993)).

Allowance of claim 40 would result in the unwarranted time-use extension of the monopoly granted for the invention as defined in claim 29 of the '562 patent.

Referring to claims 41-49 of the instant application, see claims 30-32, 60, 40, 33-34, 61 and 35 of the '562 patent, respectively.

Referring to claims 50-51 of the instant application, see claims 81-82 of the '562 patent. Also note that the limitations of claims 49, 47, 46, 41 and 40, are all covered by claims 81- 82.

Referring to claims 52-57 of the instant application, see claims 83, 36-39 and 85 of the '562 patent, respectively.

Referring to claims 58-59 of the instant application, see claims 86 of the '562 patent.

In regards to independent claim 87 (and all subsequent independent claims) of the instant application, see claim 1 of the '562 patent for an apparatus that contains identical limitations, except for the limitation of "image-based promotional data" in the instant application, as opposed to a "EPG data" in the '562 patent. Again, since the limitation "image-based promotional data" is broader than the limitation "EPG data", claim 87 of the instant application is anticipated by the specific claim 1 in the '562 patent (see *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993)).

Allowance of claim 87 (and all subsequent independent claims) of the instant application would result in the unwarranted time-use extension of the monopoly granted for the invention as defined in claim 1 of the '562 patent.

Referring to claim 88 of the instant application, see claim 1 of the '562 patent.

Referring to claims 89-98 of the instant application, see claims 2-5, 9-13, 16, and 52 of the '562 patent, respectively.

Referring to claims 99-100 of the instant application, see claim 21 of the '562 patent.

Referring to claims 101-113 of the instant application, see claims 22-25, 29-30, 32, 31, 35, 80, 36, 65 and 41 of the '562 patent, respectively.

Referring to claims 114-115 of the instant application, see claim 42 of the '562 patent.

Referring to claims 116-117 of the instant application, see claims 68 and 43 of the '562 patent, respectively.

Referring to claim 118 of the instant application, the examiner notes that it would have been obvious to multiplex compressed image-based promotional data together with program data for the purpose of properly organizing the data by packaging the program data and EPG data into a single 6Mhz channel for transmission, thereby also conforming to a general television distribution system.

Referring to claims 119-121 of the instant application, see claims 45, 76 and 46 of the '562 patent, respectively.

Referring to claims 122-123 of the instant application, see claim 47 of the '562 patent.

Referring to claims 124-125 of the instant application, see claims 77 and 81, respectively.

Referring to claim 126 of the instant application, the examiner notes that it would have been obvious to pre-store and display indicia, for the purpose of having instant access to the indicia and preventing any latency created from receiving the indicia from an external source.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 40-42, 44-45, 57-58, 87-88, 90-95, 99-100, 102, 104-106, 108, 112-114, 116-117, 120-122, 124 and 126 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Matthews, III (U.S. Patent No. 5,815,145).

Referring to claim 40, Matthews discloses an apparatus for receiving electronic program guide (EPG) and program data transmitted on plurality broadcast channels (see receiver 20 in Figures 1 and 2 and Column 3, Lines 18-23 for receiving the program data over network 14 and Column 4, Lines 3-8 for transmitting the program data over a plurality of broadcast channels and Column 6, Lines 64-67 Column 7, Lines 1-6 and 37-55 for also receiving the still images displayed in Figure 4 in program guide form from the central node 12 over network 14), said EPG data including image data

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representing images of reduced, less than normal size to identify respective programs (see Figure 4 and Column 4, Lines 44-61 for the EPG data containing a single frame image, which is of a reduced size because multiple single image frames are shown in the space where an entire program is normally displayed) which currently are and will be transmitted on several broadcast channels (see Column 5, Lines 44-47 for the still images being stored at the client or transmitted from the central control node 12 (therefore transmitted over the video distribution network 16) and also note Column 11, Lines 48-54) and said program data including video and audio data of plural programs (see again Column 3, Lines 18-24) currently being transmitted on respective broadcast channels (see again Column 11, Lines 48-54).

Matthews also discloses receiving means for receiving the program data transmitted on different broadcast channels and the EPG data transmitted with said program data (see interactive station controller 20 in Figure 2 for receiving the program data and EPG data multiplexed together into a composite signal by MUX 212 in Figure 1 and at Column 11, Lines 48-54).

Matthews also discloses separating means for separating the received EPG data from the received program data (see Column 11, Lines 37-47 for transmitting the program data and EPG data (digital data) on separate channels and Figure 2 for the interactive station controller 20 containing an analog and digital decoder for separating the program data from the EPG data (also note Column 3, Line 64 through Column 4, Line 2).

Matthews also discloses storage means for storing the separated EPG data (see memory system 68 in Figure 2 and Column 5, Lines 62-64 for the EPG data being stored in the memory system 68).

Matthews also discloses display means for displaying a program represented by the separated program data (see television 18 in Figure 1 and Column 3, Lines 31-39).

Matthews also discloses read-out means for selectively retrieving said EPG data from said storage means (see again Column 5, Lines 62-64 for process block 120 provides a means for selectively retrieving the program guide from memory system 68 and note that Column 6, Line 35 through Column 7, Line 15 indicating which program still images will be displayed in the program guide and that the still images can be stored at the interactive station controller 20 (see Column 7, Lines 40-42)).

Matthews also discloses means for displaying on said display means said images of reduced, less than normal size represented by said retrieved EPG data (see Figures 4 and 5 and Column 5, Line 47 through Column 7, Line 15 for creating the program guide in Figure 4 which displays the images of reduced size represented by EPG data received from central node 12) in superposition over the displayed program (see Column 4, Lines 26-34 for creating a superimposed video display including the program data and EPG data).

As stated in the arguments above, the examiner's argument regarding the non-limiting scope claim language stands (see arguments above), however, in the case that Applicant does not agree and traverses the examiner's argument, and provided that the examiner would agree with Applicant's traversal, in order to expedite the prosecution of

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the instant application, the examiner will also provide evidence of how Matthews would read on the amended claim limitations.

Matthews further discloses that said image data (the still images included in the EPG data) is sufficient for generating said reduced size images (see Figure 4 for displaying the reduced size images and note that if the still images transmitted from central node 12 or stored at the interactive station controller 20 (see Column 7, Lines 37-46) were not sufficient, then the images would not be generated by interactive station controller 20 (see Column 7, Lines 1-4 for displaying an alternative still image if the still image needed for display is not available)).

Matthews further discloses that the generation of said reduced size images (see Figure 4 and Column 6, Line 64 through Column 7, Line 2) does not require linking said image data to other data (further note at Column 6, Line 64 through Column 7, Line 2 that Matthews does not require a link to a video preview on a continuous media server and only retrieves the still images for display in the EPG, which is analogous to how Shiga is displaying the program guide in Figure 4). The examiner again notes the 112 2<sup>nd</sup> paragraph rejection for the claim limitations being broad and how "other data" can be any type of data. The examiner has taken the interpretation consistent with Applicant arguments (of the link to the video preview) in order to reject the amended claim limitations of the instant application. Clearly if the instant application provides the program guide in Figure 4, there would have to exist a link for the programs that will be displayed on the program guide strip and the actual still images that should be placed in the strip, which is analogous to the program guide taught by the Matthews reference.



Referring to claim 41, Matthews discloses that the received EPG data further includes text data representing information associated with each program identified by said image data (see Column 8, Lines 28-31 for the EPG data also including text data and also note text data presented in the program guide of Figure 4), and said read-out means is operable to retrieve the text data from the storage means and supply the retrieved text data to said display means (see Figure 4 and Column 8, Lines 39-44 for including summary information with the still image graphic on the display and further note that the information stored on the EPG database can be stored at the interactive station controllers (see Column 7, Lines 40-42)). Also note process block 124 in Figure 5 and Column 5, Line 62 through Column 6, Line 17 for how text data ("07" and "CBS") is retrieved and displayed in the program guide of Figure 4.

Referring to claim 42, Mathews disclosing image selecting means for selecting one of the displayed reduced size images (see cursor 108 in Figure 4 and Column 5, Lines 6-15) to cause said read-out means to retrieve from said storage means the text data associated with the program identified by said selected reduced size image for display therewith (see process block 124 in Figure 5 and Column 5, Line 62 through Column 6, Line 17 and Column 8, Lines 28-38 for retrieving text data when the user focuses on a program in the program guide of Figure 4).

Claim 44 corresponds to claim 42, where Matthews discloses that the image selecting means comprises a cursor and cursor control means operable by a user to position said cursor at a desired one of the displayed reduced size images and thereby select said desired reduced size image (see Column 5, Lines 6-46 and Figure 4).

Claim 45 corresponds to claim 40, where the retrieved EPG data identifies respective programs, which currently are being transmitted (see Figure 4 and Column 5, Lines 36-42 for the still images being selectable by the user, which tunes to the currently transmitted program) and further comprises image selecting means for selecting one of the displayed reduced size images (see Column 5, Lines 6-15), and tuning means for tuning said apparatus to the broadcast channel which transmits the program identified by the selected reduced size image (see Column 3, Lines 64-67).

Claim 57 corresponds to claim 40, where Matthew further teaches a memory for pre-storing predetermined display indicia (see process block 124 and Column 5, Lines for the memory 68 storing graphic and text information (see Column 6, Lines 4-6) to be included in the program guide of Figure 4), said receiving means being operable to receive as part of said EPG data, access information for accessing selected display indicia (see Column 5, Line 62 through Column 6, Line 11 for the receiving means (interactive station controller 20) being able to receive format information (access information) for accessing selected display indicia depending on what channels will be displayed in the program guide of Figure 4), said read-out means being operable to read out said selected display indicia in response to the received access information (see process block 120 in Figure 5 and Column 5, Lines 52-60 for requested the program guide displayed in Figure 4, which will utilize the access information disclosed by process block 124 at Column 5, Line 62 through Column 6, Line 11) and said display means being operable to display said selected display indicia (see Column 7, Lines 7-

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14) in superposition over said displayed program (see mixer 76 in Figure 2 and Column 4, Lines 26-34).

Claim 58 corresponds to claim 41, where Matthews discloses display means that is operable to display a text window (the "ABC" and "07" text window) superimposed over said displayed program (see the rejection of claim 40 for mixer 76 in Figure 2 superimposing the text window in the program guide over a displayed program), and further comprises image selecting means for selecting one of the displayed reduced size images to cause said read-out means to retrieve said text data representing information associated with the program identified by said selected reduced size image for display in said text window (see Column 5, Lines 6-15 for the image selecting means selecting the reduced size image and in turn displaying the "ABC" and "07" text window under the reduced size image). Further note that the image selecting means could be read on the initial activation of the program guide being displayed over the displayed television program, and therefore, retrieving and displaying the "ABC" and "07" superimposed over the displayed program by the use of mixer 76.

Referring to claim 87, Matthews also discloses image-based promotional data (EPG data) associated with programs which are to be transmitted (see Column 7, Line 43 through Column 8, Line 16 for the EPG data stored in the EPG database at the central node 12, which are transmitted with the programs to the interactive station controller 20 (see Column 11, Lines 48-52 for multiplexing the programs and EPG data together before transmission)).

Matthews also discloses generating said image-based promotional data including

image data identifying corresponding programs which are to be transmitted, said image data representing reduced size images which have a display size that is less than the display size for displayable data of said programs (see Column 7, Line 43 through Column 8, Line 44 for managing/generating EPG data at the EPG database at central control node 12 in Figure 1, where the EPG data includes images of reduced size that represent programs that will be transmitted).

Lawler also discloses providing program data constituting at least one program currently being transmitted (see Column 3, Lines 18-24 for transmitting programs from central control node 12 over network 14 to the interactive station controller 20 in Figure 1).

Lawler also discloses combining said image-based promotional data and said program data to generate combined data (see again Column 11, Lines 48-52 for multiplexing/combining the program data and EPG data).

Lawler also discloses transmitting the combined data (see Column 11, Lines 51-52 for delivering the IT composite signal to interactive network 14 for distribution to the interactive station controller 20 in Figure 1).

As stated in the arguments above, the examiner's argument regarding the non-limiting scope claim language stands (see arguments above), however, in the case that Applicant does not agree and traverses the examiner's argument, and provided that the examiner would agree with Applicant's traversal, in order to expedite the prosecution of the instant application, the examiner will also provide evidence of how Matthews would read on the amended claim limitations.

Matthews further discloses that said image data (the still images included in the EPG data) is sufficient for generating said reduced size images (see Figure 4 for displaying the reduced size images and note that if the still images transmitted from central node 12 or stored at the interactive station controller 20 (see Column 7, Lines 37-46) were not sufficient, then the images would not be generated by interactive station controller 20 (see Column 7, Lines 1-4 for displaying an alternative still image if the still image needed for display is not available)).

Matthews further discloses that the generation of said reduced size images (see Figure 4 and Column 6, Line 64 through Column 7, Line 2) does not require linking said image data to other data (further note at Column 6, Line 64 through Column 7, Line 2 that Matthews does not require a link to a video preview on a continuous media server and only retrieves the still images for display in the EPG, which is analogous to how Shiga is displaying the program guide in Figure 4). The examiner again notes the 112 2<sup>nd</sup> paragraph rejection for the claim limitations being broad and how "other data" can be any type of data. The examiner has taken the interpretation consistent with Applicant arguments (of the link to the video preview) in order to reject the amended claim limitations of the instant application. Clearly if the instant application provides the program guide in Figure 4, there would have to exist a link for the programs that will be displayed on the program guide strip and the actual still images that should be placed in the strip, which is analogous to the program guide taught by the Matthews reference.

Referring to claim 88, Matthews discloses that the image-based promotional data (EPG data) includes text data (see Column 8, Lines 28-38 for providing text description

from the EPG database along with the image-based promotional (EPG) data (still images)).

Referring to claim 90, Matthews discloses providing text data associated with said at least one program currently being transmitted (see the rejection of claim 88), combining said text data with said image-based promotional data and said program data (see Column 7, Line 43 through Column 8, Line 44 for the still image and text data being provided by the EPG database and Column 11, Lines 48-52 for multiplexing the different pieces of data together) and transmitting the combined image-based promotional data, program data and text data (see Column 11, Lines 51-52 for delivering the IT composite signal to interactive network 14 for distribution to the interactive station controller 20 in Figure 1).

Referring to claim 91, Matthews discloses providing program data comprising supplying video and audio data of plurality programs, each being transmitted over a respective channel (see receiver 20 in Figures 1 and 2 and Column 3, Lines 18-23 for receiving the program data over network 14 and Column 4, Lines 3-8 for transmitting the program data over a plurality of broadcast channels and Column 6, Lines 64-67 Column 7, Lines 1-6 and 37-55 for also receiving the still images displayed in Figure 4 in program guide form from the central node 12 over network 14).

Referring to claims 92-95, see the rejection of claims 40, 45 and 41-42, respectively.

Referring to claims 99-100, 102 and 104, see the rejection of claims 87-88 and 90-91, respectively.

Referring to claims 105-106, 108 and 112, see the rejection of claim 40-42 and 57, respectively.

Referring to claim 113, see the rejection of claims 40 and 87 for teaching both the transmitter and receiver limitations.

Referring to claim 114, see the rejection of claim 88.

Referring to claim 116, see the rejection of claim 91.

Referring to claim 117, see the rejection of claim 42.

Referring to claim 120, see the rejection of claim 57.

Referring to claim 121, see the rejection of claims 40 and 87 for teaching both the transmitter and receiver limitations.

Referring to claim 122, see the rejection of claim 88.

Referring to claim 124, see the rejection of claim 91.

Referring to claim 126, see the rejection of claim 57.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 43, 46-52, 59, 89, 96-98, 101, 103, 107, 109-110, 115, 118, 123 and 125 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews, III (U.S. Patent No. 5,815,145) in view of Lawler et al. (U.S. Patent No. 5,907,323).

Referring to claim 43, Matthews discloses all of the limitations in claim 42, as well as text data including broadcast identifying data (see Figure 4 for including "CBS" in the display for each channel), broadcast channel data at which said associated program is to be transmitted (see Figure 4 for displaying channel "04", which is the channel that the broadcast channel is transmitted on) and description data providing a description of said associated program (see the rejection of claims 41-42 for program summary information), but fails to teach time data and title data identifying the title of the associated program.

Lawler discloses a time bar, which defines the times at which each program will be aired and title data identifying the title of the associated program (see Figure 3B).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the EPG of Matthews, using the time data, as taught by Lawler, for the purpose of providing improved methods of providing program information to viewers (see Column 2, Lines 36-37 of Lawler).

Referring to claim 46, see the rejection of claim 43. Note that both Matthews and Lawler clearly discloses program table data (see Figure 4 of Matthews and Figure 3B of Lawler).

Claim 47 corresponds to claim 46, where Lawler further discloses text data that further comprises program content data providing a summary of the content of each of the respective programs to be transmitted (see program summary table 96 in Figure 3B of Lawler).



Claim 48 corresponds to claim 47, where Matthews discloses that the program table data (in Figure 4) is associated with programs currently being transmitted (see again Column 5, Lines 36-42 for the still images being selectable by the user, which tunes to the currently transmitted program), but silent as to the program table data being associated with programs to be transmitted at a predetermined time period, as well as, the program content data (summary data) being associated with said programs currently being transmitted and said programs to be transmitted during a fraction of said predetermined time period.

Lawler discloses a program time guide in Figure 3B. The program time guide clearly discloses that the program table data is associated with programs transmitted during a predetermined time period (see Figure 3B for Trailside being transmitted at 3pm), as well as the program content data being associated with programs currently being transmitted (note that if 3pm is the current time, then if the user selects Kung Fu, then the program summary table 96 will display program content data for a program currently being transmitted) and during a fraction of said predetermined time period (note that if the predetermined time period is from 3pm to 4pm, then Today's Gourmet is transmitted for a fraction of the predetermined time period from 3:30pm to 4pm).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the EPG of Matthews, using the time data, as taught by Lawler, for the purpose of providing improved methods of providing program information to viewers (see Column 2, Lines 36-37 of Lawler).

Claim 49 corresponds to claim 47, where Matthews discloses that the received EPG data is multiplexed with the received program data (see again Column 11, Lines 48-54).

Claim 50 corresponds to claim 49, where Matthews discloses that the receiving means includes decompressing means for expanding the compressed program data (see Column 4, Lines 23-25). Note that if the receiver of Matthews "decompressing" incoming program data (digital video signals), then the digital video signals would have to be compressed in order to performed a decompression process on the digital video signals.

Claim 51 corresponds to claim 49, where Matthews discloses that the EPG data and program data are received via satellite transmission channels (see Column 3, Lines 48-51), each satellite transmission channel comprising plurality broadcast channels multiplexed with the EPG data (see again Column 11, Lines 48-54), and wherein the separating means comprises demultiplexing means for demultiplexing each satellite transmission channel to recover said EPG data and the program data transmitted on each of the said broadcast channels (see again Column 11, Lines 48-54 and note that if the EPG data and program data are multiplexed by mux 212 in Figure 1, the interactive station controller would inherently have to perform a demultiplexing process in order to properly retrieve the data from the incoming broadcast channels).

Claim 52 corresponds to claim 51, where Matthews discloses a tuning means for tuning said apparatus to a selected broadcast channel (see Column 3, Lines 64-67) and Lawler discloses a memory means for storing the recovered program data transmitted

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on the selected broadcast channel and means for reading out the program data stored in said memory means and supplying same to said display means to display said read out program data (see Column 10, Lines 1-3 for a VCR connected to the viewer's station 16, which is inherently capable of recording and playing back programs that are recorded on a VHS tape (the memory)).

Claim 59 corresponds to claim 58, where Matthews teaches that the text data displayed in said text window includes the broadcast channel ("07") over which identified program is transmitted (see Figure 4 of Matthews), however Matthews fails to display the title of the identified program in the text window.

Lawler discloses displaying a title of a program in a selected text window (see Figure 3B).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the EPG of Matthews, using the time data, as taught by Lawler, for the purpose of providing improved methods of providing program information to viewers (see Column 2, Lines 36-37 of Lawler).

Referring to claim 89, Matthews discloses that the text data includes description data providing a description of the program to be transmitted (see Column 8, Lines 28-38 for providing text description from the EPG database along with the image-based promotional (EPG) data (still images)), but fails to teach that the text data includes title data identifying the title of a program to be transmitted and transmission data identifying date and time at which said program is to be transmitted.

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Lawler discloses a time bar and date icons, which defines the times and dates at which each program will be aired and title data identifying the title of the associated program (see Figure 3B).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the EPG of Matthews, using the time data, as taught by Lawler, for the purpose of providing improved methods of providing program information to viewers (see Column 2, Lines 36-37 of Lawler).

Referring to claim 96, Matthews discloses that the text data includes description data providing a description of the program to be transmitted (see Column 8, Lines 28-38 for providing text description from the EPG database along with the image-based promotional (EPG) data (still images)), but fails to teach that the text data includes title data identifying the title of a program to be transmitted and transmission data identifying date and time at which said program is to be transmitted. Further notes that Matthews teach displaying channel information (see "07" in Figure 4 in the program tile).

Lawler discloses a time bar and date icons, which defines the times and dates at which each program will be aired and title data identifying the title of the associated program (see Figure 3B).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the EPG of Matthews, using the time data, as taught by Lawler, for the purpose of providing improved methods of providing program information to viewers (see Column 2, Lines 36-37 of Lawler).

Referring to claims 97-98, see the rejection of claims 49-50, respectively.

Referring to claim 101, see the rejection of claim 96.

Referring to claim 103, see the rejection of claim 96 and further note that Lawler teaches category data identifying a category type of the program currently being transmitted (see Figure 6 for the text summary panel window containing different category items that correspond to each show selected from the program tiles (also note Column 9, Line 61 through Column 10, Line 41)).

Referring to claims 107 and 109-110, see the rejection of claims 96 and 49-50, respectively.

Referring to claim 115, see the rejection of claim 89.

Referring to claim 118, see the rejection of claims 49-50.

Referring to claim 123, see the rejection of claim 89.

Referring to claim 125, see the rejection of claims 49-50.

10. Claims 53-56, 111 and 119 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews, III (U.S. Patent No. 5,815,145) in view of Hendricks et al. (U.S. Patent No. 5,600,364).

Referring to claim 53, Matthews discloses transmitting a plurality of broadcast channel to the interactive controller 20, as well as displaying a program guide with still images that represent each channel broadcasted to the viewer (see Figure 4 and the rejection of claim 40), but fails to teach that one of the channels broadcasted to the viewer is a promotional channel and the program data transmitted thereon is

promotional video and audio data representing particular programs transmitted on several other broadcast channels.

Hendricks discloses a plurality of promotional channels transmitted to the viewer (see Figure 20b for channels 101-109 being commercial channels), where the promotional channel provides video and audio data to the viewer on each channel (see Column 36, Lines 51-57), and further note that the promotional video and audio data is representative of the programs that were selected by the user and sent to the headend for processing by the central facility (see Figure 17 and Column 34, Lines 40-47), therefore the promotional channel shows promotional that represent particular programs that were viewed/transmitted on several other channels.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify one of the plurality of broadcast channel transmitted from the central node 12, as taught by Matthews, to include a promotional channel, as taught by Hendricks, for the purpose of targeting specific video/audio and commercial/promotional video/audio to specific viewers/consumers (see Column 5, Lines 34-39 of Hendricks).

Claim 54 corresponds to claim 53, where Matthews teaches that the display means is operable to display the retrieved text data in superposition over a displayed video channel (see the rejection of claims 40-41 for the use of a mixer and displaying "07" and "CBS" in the superimposed program guide as taught by Matthews), and again, see the rejection of claim 53 for Hendricks modifying one of the video channel to include a promotional video channel, therefore if one of the promotional channel (taught by

Hendricks) is tuned to by the interactive station controller 20 in Figure 2, then the superpositioned program guide would be overlaid over the tuned promotional channel.

Claim 55 corresponds to claim 53, where Matthews teaches that the display means is operable to display the retrieved text data in superposition over a displayed video channel (see the rejection of claims 40-41 for the use of a mixer and displaying "07" and "CBS" in the superimposed program guide as taught by Matthews), and again, see the rejection of claim 53 for Hendricks modifying one of the video channel to include a promotional video channel, therefore if one of the promotional channel (taught by Hendricks) is tuned to by the interactive station controller 20 in Figure 2, then the superpositioned program guide would be overlaid over the tuned promotional channel and the table would be representative of programs to be transmitted on a selected non-promotional broadcast channel (see Column 4, Lines 44-55 and Figure 4 of Matthews).

Claim 56 corresponds to claim 53, where Matthews teaches that the display means is operable to display the retrieved text data in superposition over a displayed video channel (see the rejection of claims 40-41 for the use of a mixer and displaying "07" and "CBS" in the superimposed program guide as taught by Matthews), and again, see the rejection of claim 53 for Hendricks modifying one of the video channel to include a promotional video channel, therefore if one of the promotional channel (taught by Hendricks) is tuned to by the interactive station controller 20 in Figure 2, then the superpositioned program guide would be overlaid over the tuned promotional channel as a description (the program guide itself), which is representative of a selected program to

be transmitted on a selected non-promotional broadcast channel (see Column 4, Lines 44-55 and Figure 4 of Matthews).

Referring to claim 111, see the rejection of claim 54.

Referring to claim 119, see the rejection of claim 54.

### ***Conclusion***

**11. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

**12.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P. Salce whose telephone number is (571) 272-7301. The examiner can normally be reached on M-F 9am-6pm.

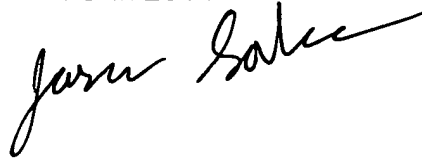
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason P Salce  
Patent Examiner  
Art Unit 2614



December 22, 2005



**CHRISTOPHER GRANT**  
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